**Subject**: FW: concrete test results

Cliff Boyd Director of Asset Recovery U.S Operations Group Oregon Office 503-226-3441 Cell 406 360-0751

**From:** Thompson, Ricknold [mailto:rithompson@mt.gov]

Sent: Thursday, November 16, 2017 10:02 AM

To: Cliff Boyd

**Cc:** Rieger, Michael; Hall, Mark **Subject:** RE: concrete test results

Hi Cliff

The analytical show non-detect for the RCRA 8 Metals in the concrete generated from the demolition of the outlying buildings at the CFAC site. As indicated from the test results, the concrete may be used for clean fill onsite.

Please contact me if you have any questions.

Rick Thompson, MT DEQ

Email: <u>rithompson@mt.gov</u> Phone: (406)444-5345 Cell: (406)461-3557

From: Cliff Boyd [mailto:cliff.boyd@calbag.com]
Sent: Wednesday, November 15, 2017 2:24 PM

**To:** Thompson, Ricknold **Subject:** concrete test results

Hi Rick

Attached are the test results for concrete that was generated as a result of the CFAC demolition and was not part of the basement concrete removal at CFAC. We had multiple outlying buildings that have been demolished that are not part of the Pot Rooms or Cell Lines where aluminum was made. Can you give me an idea on if it's okay to use it as fill and build ramps into the basements with?

Cliff Boyd Director of Asset Recovery U.S Operations Group Oregon Office 503-226-3441 Cell 406 360-0751

**From:** Thompson, Ricknold [mailto:rithompson@mt.gov]

**Sent:** Tuesday, June 06, 2017 10:33 AM

To: Cliff Boyd

Cc: Hall, Mark; Rieger, Michael; Hendrickson, Mary; Thamke, Ed

Subject: RE: sharing information

Hi Cliff

Thanks for the emails. It has been a while since we have conversed. Glad to know you are still in the waste management business.

From a solid waste regulatory perspective, concrete from the demolition at CFAC can be used for "clean fill" if it meets the criteria defined in rule. "Clean fill" is defined by ARM 17.50.502(4) as.....soil, dirt, sand, gravel, rocks, rebar-free concrete, emplaced free of charge to the person placing the fill, in order to adjust or create topographic irregularities for agricultural or construction purposes.

Based on the picture attached to your e-mail, the concrete to be used for clean fill appears to meet the definition given above. However, I see paint on the concrete which gives me cause for concern that the concrete is not 100% clean. To be consistent with the Solid Waste Program's directive to others who have used concrete as clean fill, the material that you intend to use should be sampled. I recommend that the concrete be sampled for RCRA 8 Metals and PCBs to remove any concerns that the material is not clean fill.

If the sampling data shows no leachable metals of concern or PCBs, the concrete can be use as clean fill. On the other hand, detection of metals or PCBs above regulatory standards would require the material to be disposed of in a Class II or hazardous waste landfill depending on the level contaminants.

As you move forward with demolition activities at CFAC, I recommend sandblasting of painted concrete walls and disposing of the residue at an appropriate solid waste facility. By so doing, the remaining concrete can be for clean fill without question after the rebar has been removed.

I hope this makes sense. I will give you a follow-up call today to make sure we are on the same page.

Sincerely

Rick Thompson
Solid Waste Section
Waste Management & Remediation Division
MT DEQ

Email: <u>rithompson@mt.gov</u> Phone: (406)444-5345 Cell: (406)461-3557

From: Cliff Boyd [mailto:cliff.boyd@calbag.com]

**Sent:** Monday, June 05, 2017 4:04 PM

To: Thompson, Ricknold; 'kathryn.norris@tetratech.com'; Jim Perris; Ryan Ford (ryan.p.ford88@gmail.com); Deryl

Leonard (<u>deryl.leonard@calbag.co</u>) **Subject:** sharing information

HI Rick – Hope all is well. It's been a long spell since we've conversed. From Bio Hazardous waste in 1991 to Concrete in 2017 we seem to keep finding each other.

Attached are two emails. I've been asked to share this information with you by numerous folks.

Best Wishes,

Cliff Boyd Director of Asset Recovery U.S Operations Group Oregon Office 503-226-3441 Cell 406 360-0751